## A.2.7 Infrared/Submillimeter/Radio/Interferometry Astronomy Program

### 1. Scope of Program

This program element supports detector, payload, and laboratory research activities relevant to NASA Infrared, Submillimeter, Radio, and Interferometry (ISRI) Astronomy flight programs. In addition to the basic scientific and technical merit of the proposed research, its relevance to the ISRI Astronomy flight programs, both existing and planned, will be a significant factor in the evaluation process. These projects include the Stratospheric Observatory for Infrared Astronomy (SOFIA), the Terrestrial Planet Finder (TPF), balloon and sounding rocket experiments, and possible Explorer and Discovery missions. Proposals to develop balloon and rocket payloads are encouraged and additional resources are being sought to support technology in ground-based interferometry. Laboratory astrophysics investigations involving atomic, molecular, and solid state spectroscopy of relevance to the natural phenomena occurring in the universe are also encouraged.

Investigations to develop detectors relevant to the requirements of the Next Generation Space Telescope (NGST), including its stretch goals, are not appropriate to this program element, but are being solicited via a separate opportunity originating with the NGST Project.

Theoretical investigations that are generally relevant to this science area are solicited separately under the Astrophysical Theory Program (see Section 2.6 in this Appendix), while projects directed mainly toward the analysis of archival data are covered under the Astrophysics Data Program (Section 2.4).

### 2. Programmatic Information and Special Future Opportunities

The ISRI program has traditionally been announced and proposals selected only every three years. The last such selection was in 1996, and the next opportunity is expected to be announced in spring of 1999. Therefore, proposals for participation in the ISRI Program are not solicited by this ROSS-98 NRA. Detailed information pertaining to the schedule for the 1999 opportunity will be provided in the ROSS-99 NRA to be issued approximately one year from now.

Individuals who would normally expect to propose to the regular ISRI opportunity are encouraged to also consider proposing in response to a new program for advanced detectors that is expected to be announced in late spring of 1998 via a separate OSS NRA. In particular, it is expected that this NRA will include a special opportunity to propose the development of future detector technologies for the SOFIA program. Such proposals will be strongly encouraged also to demonstrate the value of their proposed investigations

to activities or missions other than SOFIA. Note, however, that this NRA is not expected to solicit proposals for the development of complete instruments for SOFIA. Additional information about this future advanced detector NRA may be obtained from:

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Sensors and Instruments Program
Code SM
NASA Headquarters
Washington, DC 20546-0001
Telephone: (202) 358-2235
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while additional information concerning the ISRI program in general may be obtained from the Discipline Scientist:

Dr. Harley Thronson
Research Program Management Division
Code SR
NASA Headquarters
Office of Space Science
Washington, DC 20546-0001
Telephone: (202) 358-0362
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